

ATTORNEY DOCKET NO. 10838STUS01U (NORT10-00206)  
U.S. SERIAL NO. 09/464,076  
PATENT

**REMARKS**

Claims 1-12 and 14-18 are pending in the application.

Claims 1-12 and 14-18 have been rejected.

Claims 1, 6, 9-12, and 14 have been amended.

**I. FINALITY OF OFFICE ACTION**

MPEP § 706.07(a) states that a second action on the merits "will not be made final if it includes a rejection, on newly cited art, ... of any claim not amended by applicant ... in spite of the fact that other claims may have been amended to require newly cited art."

In the July 19, 2002 Office Action, the Examiner rejected Claims 7 and 8 over U.S. Patent No. 5,774,854 by Sharman in view of "well known prior art." In the response filed on October 21, 2002, the Applicant did not amend Claims 7 and 8. In the January 15, 2003 Office Action, the Examiner cites "Computer Dictionary" by Microsoft Press in rejecting Claim 7 and O'Donnell, "Programming for the Real World – A Guide to Internationalization" in rejecting Claim 8.

As a result, the Examiner issued a rejection on newly cited art of a claim that was not amended by the Applicant. According to MPEP § 706.07(a), the January 15, 2003 Office Action could not be made final. The Applicant therefore respectfully requests withdrawal of the finality of the Office Action.

Further, because the January 15, 2003 Office Action could not be made final, the Applicant is entitled to amend the claims, and the Examiner cannot refuse to enter the amendment.

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## II. OBJECTIONS TO SPECIFICATION

The Office Action objects to the specification because of the Applicant's use of the phrase "text to speech" rather than the term "text-to-speech." This objection is respectfully traversed.

The Office Action first notes that the phrase "text to speech" might be "grammatically unclear" and cause "grammatical ambiguity." (*Office Action, Page 3, Paragraph 2.b.A*). The Applicant notes that the Office Action fails to identify any specific portion of the specification that is unclear or ambiguous. The assertion that the phrase "text to speech" generally might be unclear and ambiguous does not show that the Applicant's specification is actually unclear and ambiguous. Further, as noted previously, this phrase is clear as evidenced by the Examiner's understanding of the phrase and by the common use of this phrase in other issued U.S. patents (such as U.S. Patent No. 5,774,854 cited in the Office Action). As a result, a person of ordinary skill in the art understands the meaning and scope of this phrase.

The Office Action also notes that the term "text-to-speech" might increase searching accuracy and efficiency. (*Office Action, Page 4, Paragraph 2.b.B*). The Applicant notes that this assertion does not identify any ambiguity in the specification.

Accordingly, the Applicant respectfully requests withdrawal of this objection. However, the Applicant notes that the Examiner is entitled to enter an Examiner's amendment replacing the phrase "text to speech" with the term "text-to-speech" at appropriate locations in the specification.

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### III. REJECTION UNDER 35 U.S.C. § 102

Claim 6 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,774,854 by Sharman ("Sharman"). This rejection is respectfully traversed.

A cited prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. MPEP § 2131; *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). Anticipation is only shown where each and every limitation of the claimed invention is found in a single cited prior art reference. MPEP § 2131; *In re Donohue*, 766 F.2d 531, 534, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985).

*Sharman* recites a text to speech system. (*Abstract*). The system receives text and splits the text into words. (*Col. 4, Line 66 - Col. 5, Line 8*). The system then performs word conversion, such as by converting numbers to words and by expanding abbreviations into complete words. (*Col. 5, Lines 5-17*). After that, the system breaks the identified words into syllables using a dictionary. (*Col. 5, Lines 20-26*). As part of breaking the words into syllables, the system may remove prefixes and suffixes from the words. (*Col. 5, Lines 26-29*). Finally, the system transcribes the syllables into phonemes. (*Col. 5, Lines 29-34*).

*Sharman* divides text into words and then divides the words into syllables. When dividing the text into words, *Sharman* does not use a dictionary. As a result, this portion of *Sharman* does not anticipate adding a textual unit to a list when the textual unit "corresponds to a stored textual unit in a vocabulary of textual units" as recited in Claim 6. When dividing the words

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into syllables, *Sharman* uses a dictionary. However, when *Sharman* locates a word in the dictionary, *Sharman* retrieves the syllables of that word from the dictionary. The word itself is not placed in a list. As a result, this portion of *Sharman* also fails to anticipate adding a textual unit to a list when the textual unit “corresponds to a stored textual unit in a vocabulary of textual units” as recited in Claim 6.

Accordingly, the Applicant respectfully requests the Examiner withdraw the § 102(b) rejection of Claim 6.

### III. REJECTION UNDER 35 U.S.C. § 103

Claims 1-5, 9-12, 14, and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sharman* in view of U.S. Patent No. 6,148,285 by Busardo (“*Busardo*”). Claim 7 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sharman* in view of “Computer Dictionary,” Microsoft Press (“*Dictionary*”). Claims 8 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sharman* in view of O’Donnell, “Programming for the Real World – A Guide to Internationalization” (“*O’Donnell*”). Claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Sharman* and *Busardo* in further view of U.S. Patent No. 5,873,393 by Hata (“*Hata*”). These rejections are respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie*

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basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

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Regarding Claims 7, 8, and 16, Claim 6 is patentable over *Sharman* as explained above. As a result, Claims 7, 8, and 16 are patentable due to their dependence from allowable Claim 6.

Regarding Claims 1 and 9-11, *Sharman* converts text to speech by splitting text into words. (*Col. 4, Line 66 - Col. 5, Line 17*). *Sharman* then assigns a "part of speech" to each word, such as by determining whether a word represents a noun or a verb. (*Col. 5, Lines 48-57*). After that, *Sharman* identifies phrase boundaries in the text, durations of identified phonemes, and breath groups in the text. (*Col. 5, Line 58 - Col. 6, Line 21*). Finally, *Sharman* generates a voice signal using this information and by identifying diphones in the identified phonemes, retrieving and concatenating the identified diphones, modifying the retrieved diphones, and producing and transmitting an audio waveform. (*Col. 6, Lines 22-60*).

*Sharman* generates an audio waveform using phonemes and diphones. In particular, *Sharman* breaks text into words, words into syllables, and syllables into phonemes. The phonemes are then used to generate the audio waveform. *Sharman* does not mention generating the audio waveform by locating a "speech sample" associated with a word as recited in Claims 1 and 9-11. } combini.

The Office Action asserts that *Sharman* processes text at the "syllable level" but does not "block or exclude the capability for the higher level application." (*Office Action, Page 5*). The Office Action then asserts *Sharman* discloses that prefix/suffix/word processing and syllable processing have "an analogous manner" at column 5, lines 28-29. (*Office Action, Page 5*). However, the cited portion of *Sharman* never asserts that the prefix/suffix/word processing is analogous to the syllable processing as asserted in the Office Action. The cited portion of *Sharman* simply states that

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when a word is not located in a dictionary, a prefix or suffix can be removed from the word. The word without the prefix or suffix can then be broken down into syllables. This portion of *Sharman* contains no indication that the audio waveform can be generated at the word/prefix/suffix level. Instead, it confirms that *Sharman* only generates the audio waveform at the syllable level.

As a result, *Sharman* fails to disclose, teach, or suggest generating an output signal by  locating a "speech sample" associated with a word in a list as recited in Claims 1 and 9-11. The remaining references are not cited by the Office Action as disclosing, teaching, or suggesting these elements of Claims 1 and 9-11.

Regarding Claim 12, as described above, *Sharman* fails to disclose, teach, or suggest adding a textual unit to a list when the textual unit "corresponds to a stored textual unit in a vocabulary of textual units" as recited in Claim 12. Also, *Sharman* fails to disclose, teach, or suggest generating an output signal by locating a "speech sample" associated with each word in a list as recited in Claim 12.

Regarding Claim 14, *Sharman* produces an audio waveform by breaking text into phonemes. *Sharman* lacks any mention of generating the audio waveform using "speech samples" associated with words, prefixes, and suffixes. As a result, *Sharman* fails to disclose, teach, or suggest a data structure that includes a field for a "textual unit" and a field for a "speech sample," where the textual unit is a word, prefix, or suffix as recited in Claim 14.

Accordingly, the Applicant respectfully requests withdrawal of the § 103(a) rejection of Claims 1-5, 7-12, and 14-18.

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**IV. CONCLUSION**

As a result of the foregoing, the Applicant asserts that the remaining Claims in the Application are in condition for allowance, and respectfully requests an early allowance of such Claims.

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**SUMMARY**

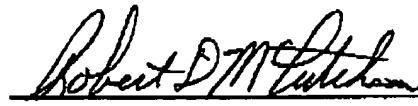
If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at [rmccutcheon@davismunck.com](mailto:rmccutcheon@davismunck.com).

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

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